Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor ~~characterized by~~ comprising a compound having an unsaturated bond-containing chain which can undergo hydrogen addition in an electrolyte solution comprising 10-80 wt% of an organic solvent and 90-20 wt% water.

2. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor ~~characterized by~~ comprising a compound having an unsaturated bond-containing chain which can undergo hydrogen addition in an electrolyte solution comprising 15-80 wt% of an organic solvent and 85-20 wt% water.

3. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to claim 1 ~~or 2~~, ~~characterized in that~~ wherein the compound having an unsaturated bond-containing chain is soluble in water, polar solvents or protic polar organic solvents.

4. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 3~~ claim 1, ~~characterized by~~ comprising at least one type of electrolyte selected from the group consisting of carboxylic acids or their salts and inorganic acids or their salts.

5. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to claim 4, ~~characterized in that~~ wherein the concentration of the inorganic acid or its salt in the electrolyte solution is 0.1-15 wt %.

6. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to claim 4, ~~characterized in that~~ wherein the concentration of the carboxylic acid or its salt in the electrolyte solution is 3-30 wt %.

7. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 6~~ claim 1, ~~characterized in that~~ wherein the compound having an unsaturated bond-containing chain is a compound having a molecular chain with a carbon-carbon or carbon-nitrogen π bond, such as alkyne, alkene or imine, and comprising at least one substitiuent group selected from the group consisting of hydroxyl, formyl, carbonyl, acyl, carboxyl, sulfonyl, sulfinyl, sulfenyl, amido, amino, alkylamino, dialkylamino, alkoxysilyl, silanol, phenylcarboxyl, nitrile, nitro, nitroso, phenol, phosphono, esters and ethers.

8. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 7~~ claim 1, ~~characterized in that~~ wherein the compound having an unsaturated bond-containing chain is included in an amount of 0.1-10 wt% based on the total weight of the electrolyte solution.

9. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 8~~ claim 1, ~~characterized in that~~ wherein the organic solvent is a protic solvent or an aprotic solvent, or a mixture thereof.

10. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 9~~ claim 1, ~~characterized in that~~ wherein the carboxylic acid or its salt is selected from the group consisting of monocarboxylic acids, dicarboxylic acids, tricarboxylic acids, saturated carboxylic acids and unsaturated carboxylic acids such as formic acid, acetic acid, propionic acid, butyric acid, p-nitrobenzoic acid, salicylic acid, benzoic acid, oxalic acid, malonic acid, succinic acid, glutaric acid, adipic acid, fumaric acid, maleic acid, phthalic acid, azelaic acid, citric acid and hydroxybutyric acid, and their derivatives and ammonium salts, sodium salts, potassium salts, amine salts and alkylammonium salts.

11. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 10~~ claim 1, ~~characterized in that~~ wherein the inorganic acid or its salt is selected from the group consisting of inorganic acids and inorganic acids having a carbon chain like alkyl, such as phosphoric acid, phosphorous acid, hypophosphorous acid, boric acid, sulfaminic acid and alkylphosphoric acids, and their ammonium salts, sodium salts, potassium salts, amine salts and alkylammonium salts.

12. (Currently Amended) An electrolyte solution for use in an electrolytic capacitor according to ~~any one of claims 1 to 11~~ claim 1, ~~characterized by~~ further comprising at least one compound selected from among the following groups: (1) chelate compounds, (2) saccharides, (3) hydroxybenzyl alcohols and/or L-glutamic acid diacetate on their salts, (4) gluconic acids and/or gluconic lactone and (5) nitro or nitroso compounds.

13. (Currently Amended) An electrolytic capacitor ~~characterized by~~ comprising the electrolytic solution according to ~~any one of claims 1 to 12~~ claim 1.

14. (Currently Amended) An electrolytic capacitor ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 10-80 wt% of an organic solvent and 90-20 wt% water, and by including therein a compound with an unsaturated bond-containing chain which can undergo hydrogen addition.

15. (Currently Amended) An electrolytic capacitor ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 15-80 wt% of an organic solvent and 85-20 wt% water, and by including therein a compound with an unsaturated bond-containing chain which can undergo hydrogen addition.

16. (Currently Amended) An electrolytic capacitor according to claim 14 ~~or 15~~, ~~characterized in that~~ wherein the compound with an unsaturated bond is a compound having a molecular chain with a carbon-carbon or carbon-nitrogen π bond, such a alkyne, alkene or imine, and comprising at least one subsyitiuent selected from the group consisting of hydroxyl, formyl, carbonyl, acyl, carboxyl, sulfonyl, sulfinyl, sulfenyl, amido, amino, alkylamino, dialkylamino, alkoxysilyl, silanol, phenylcarboxyl, nitrile, nitro, nitroso, phenol, phosphono, esters and ethers.

17. (Currently Amended) An electrolytic capacitor according to ~~any one of claims 14 to 16~~ claim 14, ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 10-80 wt% of an organic solvent and 90-20 wt% water, and having the compound with an unsaturated bond-containing chain present on the electrode surface.

18. (Currently Amended) An electrolytic capacitor according to ~~any one of claims 14 to 16~~ claim 14, ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 15-80 wt% of an organic solvent and 85-20 wt% water, and having the compound with an unsaturated bond-containing chain present on the electrode surface.

19. (Currently Amended) An electrolytic capacitor according to claim 17 ~~or 18~~, ~~characterized in that~~ wherein the compound with an unsaturated bond-containing chain is adhered to or thoroughly permeated into the electrolyte surface by coating or electrolyte solution immersion.

20. (Currently Amended) An electrolytic capacitor according to ~~any one of claims 14 to 19~~ claim 14, ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 10-80 wt% of an organic solvent and 90-20 wt% water, and including the compound of an unsaturated bond-containing chain in the separator of the electrolytic capacitor.

21. (Currently Amended) An electrolytic capacitor according to ~~any one of claims 14 to 19~~ claim 14, ~~characterized by~~ employing an electrolyte solution comprising a solvent composed of 15-80 wt% of an organic solvent and 85-20 wt% water, and including the compound of an unsaturated bond-containing chain in the separator of the electrolytic capacitor.

22. (Currently Amended) An electrolytic capacitor according to claim 20 ~~or 21~~, ~~characterized in that~~ wherein the compound with an unsaturated bond-containing chain is adhered to or thoroughly permeated into the separator by coating or electrolyte solution immersion.

23. (Currently Amended) An electrolyte capacitor according to ~~any one of claims 13 to 18~~ claim 14, ~~characterized in that~~ wherein the content of the compound with an unsaturated bond-containing chain in the electrode foil is 0.01 mg/cm^2 to 1 mg/cm^2 (projectional area).

24. (Currently Amended) An electrolyte capacitor according to ~~any one of claims 13 to 23~~ claim 14, ~~characterized in that~~ wherein the content of the compound with an unsaturated bond-containing chain in the separator is 0.01 mg/cm^2 to 1 mg/cm^2 (projectional area).

25. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2 wherein the compound having an unsaturated bond-containing chain is soluble in water, polar solvents or protic polar organic solvents.

26. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2 comprising at least one type of electrolyte selected from the group consisting of carboxylic acids or their salts and inorganic acids or their salts.

27. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2, wherein the compound having an unsaturated bond-containing chain is a compound having a molecular chain with a carbon-carbon or carbon-nitrogen π bond, such as alkyne, alkene or imine, and comprising at least one substitiuent group selected from the group consisting of hydroxyl, formyl, carbonyl, acyl, carboxyl, sulfonyl, sulfinyl, sulfenyl, amido, amino, alkylamino, dialkylamino, alkoxysilyl, silanol, phenylcarboxyl, nitrile, nitro, nitroso, phenol, phosphono, esters and ethers.

28. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2, wherein the compound having an unsaturated bond-containing chain is included in an amount of 0.1-10 wt% based on the total weight of the electrolyte solution.

29. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2, wherein the organic solvent is a protic solvent or an aprotic solvent, or a mixture thereof.

30. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2, wherein the carboxylic acid or its salt is selected from the group consisting of monocarboxylic acids, dicarboxylic acids, tricarboxylic acids, saturated carboxylic acids and unsaturated carboxylic acids such as formic acid, acetic acid, propionic acid, butyric acid, p-nitrobenzoic acid, salicylic acid, benzoic acid, oxalic acid, malonic acid, succinic acid, glutaric acid, adipic acid, fumaric acid, maleic acid, phthalic acid, azelaic acid, citric acid and hydroxybutyric acid, and their derivatives and ammonium salts, sodium salts, potassium salts, amine salts and alkylammonium salts.

31. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2, wherein the inorganic acid or its salt is selected from the group consisting of inorganic acids and inorganic acids having a carbon chain like alkyl, such as phosphoric acid, phosphorous acid, hypophosphorous acid, boric acid, sulfaminic acid and alkylphosphoric acids, and their ammonium salts, sodium salts, potassium salts, amine salts and alkylammonium salts.

32. (New) An electrolyte solution for use in an electrolytic capacitor according to claim 2 further comprising at least one compound selected from among the following groups: (1) chelate compounds, (2) saccharides, (3) hydroxybenzyl alcohols and/or L-glutamic acid diacetate on their salts, (4) gluconic acids and/or gluconic lactone and (5) nitro or nitroso compounds.

33. (New) An electrolytic capacitor comprising the electrolytic solution according to claim 2.

34. (New) An electrolytic capacitor according to claim 15, wherein the compound with an unsaturated bond is a compound having a molecular chain with a carbon-carbon or carbon-nitrogen π bond, such a alkyne, alkene or imine, and comprising at least one subsyitiuent selected from the group consisting of hydroxyl, formyl, carbonyl, acyl, carboxyl, sulfonyl, sulfinyl, sulfenyl, amido, amino, alkylamino, dialkylamino, alkoxysilyl, silanol, phenylcarboxyl, nitrile, nitro, nitroso, phenol, phosphono, esters and ethers.

35. (New) An electrolytic capacitor according to claim 15, employing an electrolyte solution comprising a solvent composed of 10-80 wt% of an organic solvent and 90-20 wt% water, and having the compound with an unsaturated bond-containing chain present on the electrode surface.

36. (New) An electrolytic capacitor according to claim 15, employing an electrolyte solution comprising a solvent composed of 15-80 wt% of an organic solvent and 85-20 wt% water, and having the compound with an unsaturated bond-containing chain present on the electrode surface.

37. (New) An electrolytic capacitor according to claim 15, employing an electrolyte solution comprising a solvent composed of 10-80 wt% of an organic solvent and 90-20 wt% water, and including the compound of an unsaturated bond-containing chain in the separator of the electrolytic capacitor.

38. (New) An electrolytic capacitor according to claim 15, employing an electrolyte solution comprising a solvent composed of 15-80 wt% of an organic solvent and 85-20 wt% water, and including the compound of an unsaturated bond-containing chain in the separator of the electrolytic capacitor.

39. (New) An electrolyte capacitor according to claim 15, wherein the content of the compound with an unsaturated bond-containing chain in the electrode foil is 0.01 mg/cm^2 to 1 mg/cm^2 (projectional area).

40. (New) An electrolyte capacitor according to claim 15, wherein the content of the compound with an unsaturated bond-containing chain in the separator is 0.01 mg/cm^2 to 1 mg/cm^2 (projectional area).